

West Nile Virus Preparedness Checklist For Regions Without Organized Mosquito Control

The following steps are recommended for developing a local response to West Nile virus (WNV) outbreaks in regions without established mosquito control programs. The recommendations are generalized and not all steps may be appropriate in every region. The amplifying bullets under each recommendation provide additional detail, but are not intended to be comprehensive. Additional information is available from the Vector-Borne Disease Section (VBDS) of the California Department of Health Services (DHS). Contact your regional VBDS office for technical assistance.

- ☐ Establish a WNV Task Force to foster communication and develop a working relationship among all agencies and individuals potentially involved in WNV response
 - Suggested WNV Task Force members (individuals or agencies):
 - Local Health Officer / Public Health
 - Environmental Health
 - County Agricultural Commissioner
 - Office of Emergency Services
 - Veterinary community representative
 - Medical community representative
 - Public Affairs
 - State or federal parks/refuges (if present in area)
 - DHS/VBDS
- ☐ Develop a written WNV response plan that identifies roles and responsibilities for monitoring and responding to local WNV activity (ranging from a “normal” season to epidemic conditions)
 - Available resources:
 - California Mosquito-Borne Virus Surveillance & Response Plan, 2003
<http://www.dhs.ca.gov/ps/dcdc/disb/pdf/CA%20Mosquito%20Response%20Plan%207-31-03.pdf>
 - Operational Plan for Emergency Response to Mosquito-Borne Disease Outbreaks
<http://www.dhs.ca.gov/ps/dcdc/disb/pdf/Op%20Plan%20Mosquito%20Disease%20Emergency%20-%202022%20Sept%2003.pdf>
- ☐ Establish monitoring and communication systems
 - Convene periodic meetings of WNV Task Force to review and modify response plans
 - Establish email group lists and phone numbers for routine notifications and alerts
 - Liaise with surrounding vector control districts and public health agencies
 - Monitor national and state surveillance information via these websites:
 - Centers for Disease Control: <http://www.cdc.gov/ncidod/dvbid/westnile/surv&control.htm>
 - U.S. Geological Survey: <http://westnilemaps.usgs.gov/>

DHS: <http://www.westnile.ca.gov>

Mosquito and Vector Control Association of California: <http://www.mvcac.org/>

- ☐ Prepare for declaration of a local emergency in response to a WNV outbreak
 - Establish criteria (trigger points) for need to declare a local emergency (typically based on lack of adequate resources to deal with public health threat)
 - Anticipate specific emergency needs
 - Determine authority to declare a local emergency; request delegation of authority from appropriate legislative body
 - Review the California Standardized Emergency Management System (SEMS). See: <http://www.oes.ca.gov/oeshomep.nsf/10884826d3b7edaa882565f0005adc7f/256716f5845f9f8f88256aa800737dc3?OpenDocument>
 - Provide background information and intent of declaration to legislative body
- ☐ Implement a public education program
 - Messages:
 - Preventing mosquito breeding
 - Personal protection measures
 - Dead Bird Hotline (1-877-WNV-BIRD)
 - Disease signs and symptoms
 - Sources for additional information and assistance
 - Prepare or acquire:
 - Press releases: general and specific (e.g., first dead bird, horse case, human case)
 - Fact sheets including frequently asked questions
 - Educational brochures (see: California Surveillance and Facts about West Nile Virus: <http://www.dhs.ca.gov/ps/dcdc/disb/pdf/WNV%20brochure.pdf>)
 - Foreign language translations of WNV fact sheets
 - Provide phone and internet links to:
 - Local agencies
 - DHS: <http://www.dhs.ca.gov/ps/dcdc/disb/disbindex.htm>
 - California Department of Food and Agriculture: http://www.cdffa.ca.gov/ahfss/ah/wnv_info.htm
 - CDC: <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>
- ☐ Develop and maintain a local surveillance network
 - Veterinary and medical community (private practitioners and labs)
 - Animal control agencies
 - State and federal parks, wetlands, wildlife refuges
 - Wildlife rehabilitation organizations
 - Horse and pet bird organizations, breeders

- Coordinate the pick-up and shipping of dead birds for virus testing
 - Obtain protocols from DHS/VBDS
 - Provide contact information for agencies picking up dead birds to VBDS Richmond office (1-877-WNV-BIRD)
 - Ensure adequate supply of shipping boxes are available
 - Determine accessibility to an ultra low freezer (-70C) for weekend storage, if necessary
 - Identify a source of dry ice for weekend storage/shipping, if necessary

- Identify high risk areas
 - Locate potential mosquito breeding sources
 - Map locations of mosquito complaint calls
 - Identify outdoor recreation areas – particularly those used during early morning or evening – such as parks, golf courses, etc.

- Identify high risk populations and focus educational efforts on:
 - Persons spending a lot of time outdoors
 - Persons living or working in or near mosquito habitats
 - Persons 50 years of age and older
 - Senior citizen communities
 - Elder care facilities (see: West Nile Virus - Infection Prevention & Control Recommendations in California Long-term Care Facilities:
<http://www.dhs.ca.gov/ps/dcdc/disb/pdf/Nursing%20Homes%20WNV%20Aug%208-03.pdf>)

- Assess local need and resources for mosquito surveillance
 - Discuss objectives and intent with DHS/VBDS
 - If possible:
 - Train personnel in sample collecting, identification, and preparation for testing
 - Acquire surveillance equipment for immature collections (e.g., dipper, collection containers, dissecting microscope for identification)
 - Acquire surveillance equipment for adult collections (e.g., light traps, gravid traps, carbon dioxide baited traps)
 - Acquire mosquito specimen identification keys
 - Seek funding sources for testing of mosquitoes

- Assess local need and resources for sentinel chicken surveillance
 - Discuss objectives and intent with DHS/VBDS
 - Obtain protocols for establishing a sentinel flock, taking and submitting blood samples
 - Obtain funding for establishment and maintenance of flock(s)
 - Obtain funding for virus testing
 - Train personnel to properly collect and submit specimens

- ☐ Assess local need and resources for establishing a mosquito control program
 - Determine if vector mosquito species are present and abundant, and evaluate their threat to human and animal populations
 - Discuss objectives and intent of program with DHS/VBDS
 - Determine public demand/acceptance (i.e., willingness of public to fund?)
 - Evaluate potential funding sources – from existing sources or special district formation
 - Review Special District formation procedures (California Health and Safety Code Sections 2000-2910; <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=hsc&group=02001-03000&file=2010-2014>)

- ☐ Assess additional resources for control program
 - Determine local codes and ordinances available to abate public nuisances
 - Determine if neighboring vector control agencies can provide emergency support
 - Have public agency employees obtain public health pest control certification by DHS/VBDS (see: Mosquito Control by Public and Private Entities in California - Q&A: <http://www.dhs.ca.gov/ps/dcdc/disb/pdf/Mosquito%20Control%20Q&A%209-25-03.pdf>)
 - Sign the Cooperative Agreement with DHS
 - Verify Department of Pesticide Regulation (DPR) certification for CDFA employees (see Q and A referenced above, and HSC Section 106925)
 - Determine needs for environmental compliance requirements (e.g., NPDES, CEQA, NEPA)
 - Determine needs for equipment, products and/or funding for:
 - habitat modification
 - biological control (mosquitofish)
 - pesticides (larvicides, adulticides)

- ☐ Assess commercial pesticide applicators' abilities to augment local control efforts
 - Determine if private pest control businesses (PCB) are offering mosquito control services and are properly certified by DPR
 - Develop a PCB referral list for general public inquiries
 - Determine if PCBs could augment emergency response